



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

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CERTIFIED MAIL No. 7013 1090 0000 1818 0461  
RETURN RECEIPT REQUESTED

March 27, 2014

Helen Ordway  
Environmental Manager  
Alon Bakersfield Refinery  
6451 Rosedale Highway  
P.O.Box 1551  
Bakersfield, CA 93308

**Re: Request for Information (RFI), Alon Bakersfield Property  
Underground Injection Control (UIC) Permit Application,  
Class I Injection Wells, R9UIC-CA1-FY11-2**

Dear Ms. Ordway:

The United States Environmental Protection Agency, Region IX (EPA), is in receipt of Alon Bakersfield Refinery's (Alon's) January 18, 2011 application to permit existing and proposed Underground Injection Control (UIC) Class I non-hazardous wells at the subject property. We found your application administratively complete and issued a letter to that effect in March 2011.

Alon's existing wells are presently regulated by the California Regional Water Quality Control Board, Central Valley Region, under Waste Discharge Order 91-102 (the Order), dated April 1991. EPA has been receiving copies of the Annual Wastewater Injection Monitoring Reports on an on-going basis, in compliance with the Order.

At this time, so we may proceed with a thorough technical review, we are seeking clarification of a few issues pertaining to your Class I permit application. We request that Alon provide the following additional information to support the January 2011 application:

**Detailed maps depicting the location of the existing injection wells:**

- Wells Red Ribbon WD-1, 2 and 3 appear to be located in Section 27, but their location within the section is not clear. Please provide a detailed map depicting their location within the section. *Detailed map of location w/in Sec 27 not provided*
- Well Paramount WI-1 appears to be located in Section 23, but its location within the section is not clear. Please provide a detailed map depicting the well location within the section. *Same.*

**Status of Well Red Ribbon 7:**

The application indicates the Red Ribbon 7 well is not operating. Please provide an update on the current status of this well. Please also provide information regarding its planned future use, or, if no plans for use, plans for properly plugging and abandoning the well. *Some detail provided. Not adequate.*

**Detailed maps depicting the location of the proposed injection wells and their type:**

We require detailed maps depicting the location of the proposed injection wells. In addition, in order for EPA to assess the cumulative impacts of future injection, the proposed type of well should be described. Please provide detailed maps depicting the location of the proposed wells, as well as a designation of the well type (horizontal or vertical). *Not Adequately provided, some maps, no detail. No information on vertical profile*

**Aquifer exemption supporting information:**

Please provide all documentation that the basal Etchegoin (Fairhaven), Chanac and Santa Margarita formations at the locations of the existing injection wells are exempt aquifers. In addition, please provide documentation that the proposed new injection wells would be completed in exempt formations (i.e., not "underground sources of drinking water" as defined by the UIC regulations).

*Information provided but invalid.*

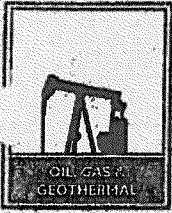
We request a written submittal in response to this request within 60 days of receipt of this letter. If you have any questions, please contact me at (415) 972-3971, or call Michele Dermer of my staff at (415) 972-3417.

Sincerely,



David Albright  
Manager, Groundwater Office

cc: Dan Wermiel, DOGGR, District 4  
Warren Gross, Regional Water Quality Control Board, Central Valley Region



# DEPARTMENT OF CONSERVATION

## DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

4800 Stockdale Highway • Suite 417 • BAKERSFIELD, CALIFORNIA 93309

PHONE 661 / 322-4031 • FAX 661 / 861-0279 • WEBSITE [conservation.ca.gov/DOG](http://conservation.ca.gov/DOG)

March 21, 2007

Mr. Bill Chadick  
Big West of California  
6451 Rosedale Hwy.  
Bakersfield, CA 93308

RE: Permit Application CA 10600003

Dear Mr. Chadick:

This letter serves as a follow-up to the meeting on March 15, 2007 which included yourself, Melinda Hicks, Dave McCoy, Brad DeWitt, Randy Adams, and myself. In that meeting you gave us an update on the above-mentioned application review process and status. You referred to a letter sent to you from the E.P.A., dated January 9, 2007, requesting that you address certain concerns that the E.P.A. had regarding your application. You requested that the DOGGR give some input on two of these items of concern, in particular Item 4 and Item 8.6.1.G.. A recap of those items and our responses are as follows:

1. Item 4. This item dealt with the E.P.A.'s concern that your proposed Class I injection in "Red Ribbon" WD-1 will not extend beyond the geographical boundaries of the exempted zone, which in this case is the Lower Santa Margarita Formation.

According to EPA/DOGGR primacy agreement, an exemption applies to an entire zone based on one of three criteria: 1. The zone bears water over 10,000 ppm TDS, 2. The zone is oil/gas productive, and/or 3. The zone has been "grandfathered" in due to a significant amount of pre-primacy injection. Not only does this exemption apply to the entire formation, in this case, the Santa Margarita (even though only the Upper Santa Margarita is productive), but to the entire administrative boundaries of Fruitvale Field.

2. Item 8.6.1.G. This item addressed the issue of the proposed injection adversely affecting existing or future commercial production in the same zone on adjacent properties.

To date, there is no commercial production from the Lower Santa Margarita within Fruitvale Field. The only production from the Upper Santa Margarita occurs over ½ mile to the east, operated by San Joaquin Facilities Management, Inc. According to Brad Dewitt of Petrotech, San Joaquin Fac. Manage. have no plans on developing the L. Santa Margarita and therefore have no objections to your injection into this zone.

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*The Department of Conservation's mission is to protect Californians and their environment by:  
Protecting lives and property from earthquakes and landslides; Ensuring safe mining and oil and gas drilling;  
Conserving California's farmland; and Saving energy and resources through recycling.*

In the March 15 meeting, you also requested this office re-visit the issue of our requirement of monitoring your well "Red Ribbon" 6A for the outward movement of the plume from past injection. This requirement is hereby rescinded based on the following:

1. "Red Ribbon" 6A is completed and being monitored in the Mason-Parker zone and there has not been any injection into that zone, in the area, since February, 2002 (from "Red Ribbon" WD1),
2. Regular monitoring, since December, 2004, have not revealed any significant breakthrough of organic tracers into 6A, from past injection into that zone, and
3. Your proposed injection in WD1, 2, & 3 will be restricted into the L. Santa Margarita Fm., significantly lower, stratigraphically, than the Mason-Parker zone.

I hope this letter resolves these issues that you requested of us, but if you need further clarification, please let me know. My phone number is (661)334-3661.

Sincerely,



Richard S. Thesken  
Associate Oil and Gas Engineer

CC: Brad Dewitt  
Petrotech